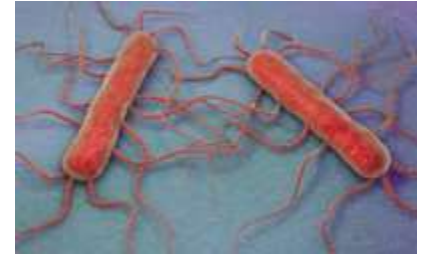


## Hydrite Book of Bugs

Are you aware that Hydrite has a Book of Bugs? If you want to learn more about certain pathogenic or non-pathogenic bacteria, yeast and molds, and how to fight them, connect with your Hydrite rep to secure a copy.

<i>Pseudomonas spp.</i>		
Gram stain	Gram negative	
Spore forming	No	
Atmosphere	Obligate aerobe*	
Indicator organisms	Enterobacteriaceae spp. IS NOT AN INDICATOR!	
Associated foods	Milk/dairy, meat, fish, fruit, vegetables, contaminated water	
Growth parameters	Optimum	Range
Temperature (vegetative cells)	25-37°C (77.0-98.6°F)	4-42°C (39.2-107.6°F)
pH	7.0	4.5-8.0
Water activity		≥ 0.97
Salt tolerance		
Sanitizer	Hydrogen peroxide, sodium hypochlorite	
Hydrite Product Examples	Saniking No. 451, Hydrogen Peroxide	
Watch outs!	Most Pseudomonas species do not pose a serious public health risk, but Pseudomonas aeruginosa is an opportunistic pathogen which poses a threat to immunocompromised individuals.	



\*Anaerobic growth may be possible if organism is in the presence of a usable nitrate source

\*Specific optimal temperature is dependent on species

Optimal temperature P. aeruginosa: 37°C

Optimal temperature P. fluorescens: 25-30°C



<i>Salmonella spp.</i>		
Gram stain	Negative	
Spore forming	No	
Atmosphere	Facultative anaerobe	
Indicator organisms	Enterobacteriaceae spp.	
Associated foods	Raw meat, dairy products, poultry, eggs, fish, shrimp, sprouts, cream-filled desserts	
Growth parameters	Optimum	Range
Temperature (vegetative cells)	37°C (98.6°F)	7-48°C (44.6-118.4°F)
pH	6.5-7.5	3.8-9.5
Water activity		≥ 0.93
Salt tolerance		< 3-4%
Sanitizer	Hydrogen peroxide, sodium hypochlorite, quaternary ammonium, glutaraldehyde, and peracetic acid-based products	
Hydrite Product Examples	Hydroxysan Plus No. 490, Sustain No. 464, Dictate No. 465, Hydrisan No. 468, Multiquat No. 455, Saniking No. 451, CDG Solution 3000, Iodosan No.485, Alpet D2	
Watch outs!	Easily destroyed with heat. Microorganisms are a challenge in low moisture foods and are relatively resistant to freezing.	



Reach out to a Hydrite **RITE** Team member for a copy of the Hydrite Book of Bugs.